

Utah State Fire Marshals Office



Course Outline

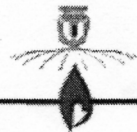


**"NFPA 25" Water Based Fire Protection
Systems**

Training, Testing, and Certification

Preparation Course

Four Day Conference



Day 1, Morning Session – Classroom

8:00 am – 12:00 am

Course Introduction

- NFPA 25
- Utah State Fire Marshals Office Rules and Regulations R710-5
- Wet Pipe
- Dry Pipe
- Preaction
- Deluge

This session will include the study of different forms of water supplies and all of the major fire sprinkler systems, appurtenances, and testing, inspection, and maintenance procedures.

Day 1, Afternoon Session – Classroom and Practical Sessions

1:00 pm – 3:00 pm

- Equipment specific inspection, video presentation
- Practical application
- Inspection of system components including piping, hangers, sprinklers, hydraulic nameplate, valves, fire department connections, seismic bracing, etc.

3:00 pm – 5:00 pm

Practical demonstration and hands on training

- Wet system inspection
- Dry system inspection
- Alarm tests
- Inspector tests
- Main drain tests

Day 2, Morning Session – Classroom

8:00 am – 12:00 am

Sprinkler Systems Continued

- Fire Code Requirements
- Automatic Sprinkler Thresholds
- Emergency Impairments
- Inspection Reports, Documentation
- Testing and Maintenance Schedules

This session will continue to enhance the participant's knowledge of the NFPA 25 requirements for fire sprinkler systems.

Day 2, Afternoon Session - Classroom and Practical Sessions

1:00 pm – 5:00 pm

- Equipment specific inspection, video presentation continued
- Practical application
- Inspection of system components including occupancy classifications, system design objectives, “K” factor calculation, etc.

This session will end with additional practical application as necessitated by participant questions and/or instructor evaluation.

Day 3, Morning Session – Classroom

8:00 am – 12:00 am

Standpipe Systems

- Value of Standpipe Systems
- Classes of Systems
- Standpipe and Hose Systems
- Installation Requirements and the Fire Code
- Water Supply for Standpipe Systems
- Pressure Regulating Valves
- NFPA 25 Inspection, Testing, and Maintenance Schedules

Day 3, Afternoon Session – Classroom

1:00 pm – 5:00 pm

Fire Pump Systems

- Principles of Operation
- Annual Tests
- Characteristic Pump Curves
- Churn Tests
- Diesel/Electrical System Conditions
- Electric Motor Controllers
- Fire Pump Drivers
- NFPA 25, General Testing, Maintenance of Fire Pumps
- Reports
- Test Results and Evaluation

This session will provide the necessary information contained in NFPA 25 for standpipe and fire pump systems. Participants will receive practical application as to how inspection, testing, and maintenance services are performed.

Day 4, Morning Session – Classroom

8:00 am – 12:00 am

Water Mist Systems

- Discharge Time
- High Velocity Water Spray System
- Medium Velocity Water Spray System
- Pressure Readings
- Summary of Water Spray Fixed System Inspection, Testing, and Maintenance
- System Piping
- Ultra-High-Speed Water Spray System Operational Tests
- Valves and Connections
- Water Supply

Day 4, Afternoon Session – Classroom

1:00 pm – 4:00 pm

Foam systems

- Alcohol-resistant foam agents
- Proportioning systems and testing
- Chemical Foam
- Fixed Foam Systems
- Fluorine-protein foam agents
- Foam System Components
- Foam-Water Sprinkler System Inspection, Testing, and Maintenance
- Low Expansion Foam
- Mechanical Foam
- Operational Tests
- Protein foam agents
- Sub Surface Foam Injection
- Synthetic foam agents
- Test Forms and Records
- Water for Foam Making

Day 4, Afternoon Session – Classroom

4:00 pm – 5:00 pm

Examination Review

These sessions will provide each participant with an in-depth understanding of the requirements of NFPA 25 as it pertains to Water Mist and Foam Systems. At the conclusion of the day a summary examination review will be conducted.